ANNUAL REPORT 2008–2009

Strategic Plan Update
The College of Management faculty and administration continue to follow the goals and objectives set forth in 2007 as part of an overall plan to increase student success, research productivity, and visibility of the College of Management at North Carolina State University. Those goals are summarized below.

Goal 1: Create an exemplary educational opportunity which will prepare students to lead in the ever-changing technological and global business climate
Goal 2: Foster an intellectual environment supportive of impactful, meaningful, leading-edge research.
Goal 3: Promote and support the advanced use of technology in instruction and research.
Goal 4: Strengthen corporate partnerships and global strategic alliances to enhance student opportunities and faculty research and to provide a student laboratory for learning based on real-world problems.
Goal 5: Strategically develop new programs and initiatives and increase enrollments to serve the growing demand for the college’s technology- and innovation-based academic and executive programs

These goals and objectives also support several of the university’s ‘five focus areas,’ especially: producing leaders for the state, nation and the world; creating educational innovation; fueling economic development; and driving innovation. This activity is reflected in our faculty’s individual and cross-disciplinary research, faculty and student projects conducted in partnership with partner companies, and instructional innovation.

The college’s ability to accomplish its goals and objectives is fundamentally dependent on expanding its faculty and staff, developing sufficient financial resources, acquiring adequate physical infrastructure, and the supporting the continued commitment and dedication of our faculty and staff. Despite economic constraints, the faculty and staff of the college continued to make significant progress toward achieving these goals. This report summarizes our accomplishments in the 2008–09 academic year.

Goal 1: Create an exemplary educational opportunity which will prepare students to lead in the ever-changing technological and global business climate

The global economic crisis of the past year placed severe fiscal constraints on the state, the university and the college. Through careful stewardship of the college’s financial resources, however, we ended the academic year with minimal disruption of services to our students. We were able to hire four full time faculty members who started in August 2009, and completed the hiring of professional academic advisors and career resources staff to provide meaningful services for our students. Also, to better prepare our students for a truly global marketplace, we continue to explore and develop new partnerships with international academic institutions that will lead to additional business-focused study abroad options and international internship opportunities for our students.

We also established a new tradition, the Leadership and Innovation Showcase, to celebrate our students’ accomplishments and to recognize the leadership and professional achievements of an individual selected from the global business community. For this competitive event, students taking project-based courses and practicum experiences are invited to enter poster presentations for the Innovation Showcase, providing a formal presentation of their solutions to a panel of judges and summary reports to guests attending this event. Our first annual Leadership and Innovation Showcase was held April 21, 2009, with nearly 30 projects entered. Scholarships are awarded to the top two undergraduate teams and the top three graduate program teams. The 2009 Person of the Year Award recipient – James Owens, chairman and CEO of Caterpillar – announced the winning teams and spoke on the topic of leadership at a convocation concluding the day’s events. He was announced as the award recipient by the college’s 2009 Person of the Year award recipient, Ben Jenkins.

Diversity
The college’s continued commitment to diversity is expressed throughout its operations. Dean Ira Weiss meets periodically with the college’s Diversity Advisory Board and other industry and advisory boards in the college to
identify sustainable opportunities for continuing to build a welcoming, supportive and inclusive environment. Faculty, students and staff are routinely invited to participate in cultural awareness and diversity programs offered by the university.

In the course of the year, the college’s student recruitment staff members reach out to diverse groups of prospective students, through program-specific recruitment fairs and involvement with the university’s recruitment activities. Career resources staff members encourage and prepare our students to participate in national diversity-focused career fairs. At the MBA level, this includes the Asian MBA, National Black MBA Association, National Hispanic MBA Association, Reaching Out MBA, and National Association of Women MBA (NAWMA) conferences and career fairs. Financial support from Wachovia helps to cover MBA students’ travel expenses. A student–alumni mentoring program for women students in the college’s Jenkins MBA program concluded its second year last year, and the college’s NAWMA chapter launched a mentorship program for its members. Undergraduate students are guided to career resources available for a wide range of population groups, including ethnic diversity, individuals with disabilities, and family-friendly companies, primarily as part of their career development activities. The Undergraduate Programs Office staff also is concluding work this year to gain approval for a new version of the introductory class that is more inclusive in its approach to meeting the goals of diversity initiatives. Wachovia has also continued its support of diversity through needs-based textbook scholarships for students in minority population groups.

Leadership and Ethics
While ethics is incorporated throughout the college’s classroom instruction, it receives special attention each spring when the college’s student Ethics Society hosts its annual Business Ethics Case Competition. In 2009, student teams participated provided solutions for this year’s theme: Managing Ethically in an Economic Crisis with Unemployment at a 25-year High. A panel of judges from the corporate community and the college’s Board of Advisors selected the three winning teams. This activity is an extension of the business ethics course offered by the College of Management, with awards supported by contributions from company sponsors. Plans are under way to add a graduate student section to the competition.

This annual competition is one example of leadership experiences available through the dozen-plus student organizations based in the college. A majority of the groups are industry-specific and allow students the opportunity to dig deeper into their selected field of study through informal presentations by practitioners and case competitions hosted by associated national organizations. Others provide service to the college; for example, the undergraduate Peer Leaders help incoming freshmen adjust to campus life, and Student Ambassadors assist with special events, from prospective student visitation days to the college’s Wachovia Executive Lecture Series.

At the graduate level, the MBA Student Association works with staff and alumni board members to host workshops, networking and other social events that contribute to the quality of the program’s student life experience. One workshop, focusing on humor in business management, included an interactive program led by a member of a local comedy improvisation group.

The Net Impact club, which started as an MBA program but is now open to all students, hosts a Sustainability Symposium each spring that brings in speakers on topics related to sustainable business issues and provides networking opportunities for students interested in working with companies that have a strong commitment to sustainable business practices. This theme for the Spring 2009 symposium was “Making Business Work for People, Planet and Profit.” MBA students also put their sustainability perspective to work through two Alternative Spring Break projects. One team of students went to New Orleans to work with small businesses recovering from the continuing effects of Hurricane Katrina, and another worked with a micro-lending agency in Trujillo, Peru, and also provided assistance to residents of a homesteading shantytown community at the base of the mountain overlooking Trujillo. The college’s Wachovia Executive Lecture series provides yet another opportunity for leadership development through presentations by chairmen and chief executive officers of some of the world’s leading companies. Speakers for the fall 2008 and spring 2009 series were J. Frank Harrison, III, chairman and CEO, Coca Cola; Ursula Burns, president, Xerox; William J. Amelio, president and CEO, Lenovo; Jim Whitehurst, president and CEO, Red Hat; Scott Custer, CEO, RBC Bank; Dennis Gillings, chairman and CEO, Quintiles Transnational.

Instructional Program Advances
The college’s faculty members develop new courses as an extension of their research and corporate outreach and in response to changes in the business environment, as well as student requests for courses on specific topics. For example, in response to the growing use of the enterprise resource planning system, SAP (Systems, Applications and
Products), the NC State College of Management this year became the first business school in North Carolina to join the SAP University Alliance Program. SAP is an enterprise resource planning system that companies use to run manufacturing, logistics, accounting, and all other aspects of business. Providing hands-on experience with this system as part of our students’ curriculum will give them a leading edge when seeking employment with companies that use this software. The alliance program makes the software available to all faculty at NC State for use in their teaching.

Similarly, the proliferation of new communications technologies – specifically, the wide range of social media options and virtual environments such as Second Life – has led to the inclusion of these new tools as methods of communication within existing courses as well as the development of a new graduate level marketing course on Social Media, offered in fall 2009.

The college is also creating new opportunities for students to work directly with companies on meaningful research projects, helping to assure that they not only are aware of current business issues but also have practice with the tools and techniques needed to help find solutions. The college’s new assistant dean for research is working with the Center for Innovation Management Studies and other college initiatives and programs to build these new relationships. Read more in the Goal 4 section of this report. Following are highlights of program-specific instructional changes.

Undergraduate Programs
The college’s Undergraduate Programs Office is now in its third year of admitting students to the college as undeclared freshman. Courses taken in their first three semesters provide the students opportunities to learn about the various disciplines in the college before selecting a major, with the aim being to improve academic and career decisions. Undergraduate Programs completed its transition this year to a professional advising model in which one professional advisor works with the same cohort of students throughout their academic program, helping to assure steady progress toward graduation. The undergraduate Peer Leaders student organization complements professional staff activities by serving as mentors for incoming freshmen, helping to ease their transition to college life during their first semester. The Undergraduate Programs Office also added a career coach to its career resources staff, and launched an ‘internship for academic credit’ option that allows students to gain valuable real world experience while continuing to advancing toward their degree requirements. Following are selected undergraduate curriculum changes.

- A new concentration in entrepreneurship was added to the college’s bachelor’s in business administration program, providing business majors the opportunity to incorporate a sequence in entrepreneurship courses into their studies. Entrepreneurship faculty in the college’s Department of Management, Innovation and Entrepreneurship (MIE) worked with the Undergraduate Programs Office to achieve this change and teach the courses.
- The minor in business administration was updated. It now includes four courses in entrepreneurship, enabling non-business majors interested in entrepreneurial activities to take a solid sequence of entrepreneurship courses as electives within their business administration minor. This provides all students in the minor curriculum a solid foundation in the principles and practices of business along with an understanding of the fundamentals and unique nature of entrepreneurial ventures. Students apply for admission to the business administration minor. MIE faculty also assisted with this change and teach the courses.
- Faculty in the college’s business management department and MIE department worked with faculty in the College of Design to develop a minor in business administration with an emphasis in entrepreneurship or other areas of business for design students.
- A new concentration in business economics, developed and taught by faculty in the college’s Department of Economics and Department of Business Management, was developed to give students a mixture of analytical skills from economics and applications from business.

Jenkins Graduate Programs – Master of Business Administration (MBA)
In response to student interest, the MBA graduate faculty has been developing a number of tightly focused one-credit-hour courses. The first set was well received by students in the past academic year, and another eight were developed for delivery in 2009-10. These short courses help students in the part-time program move more quickly toward their degree completion. The MBA program continues to work closely with the college’s centers and initiatives to develop additional new courses, practicum experiences, internships and career opportunities for students in its seven academic concentrations. The MBA program leadership team is also working with other NC State colleges to develop joint degrees programs. Read more in the Goal 4 section of this report.
Jenkins Graduate Programs – Master of Accounting (MAC)
The Jenkins MAC program’s concentration in Enterprise Risk Management (ERM) continues to be popular among its students, with 21 enrolling in this option last year. MAC students may also pursue an IT concentration, which also remains strong. MAC continues to offer several study abroad opportunities, as well as a customized CPA exam review. Faculty, staff and students in the program are also working on a Second Life environment for the program and Ernst & Young, funded by a grant from the Ernst & Young Foundation. Read more about the ERM Initiative’s support of the MAC Program’s ERM Concentration in the Goal 4 section of this report.

Jenkins Graduate Programs – Master of Global Innovation Management (MGIM)
The college completed the first year of this new international graduate program, offered jointly with AIE University in Aix-en-Provence, France. The program’s 18 students spent their first semester in France and their second semester at NC State, and concluded with a summer internship. Discussions have begun to add a third international component to this program – a month in China following the semester at the NC State College of Management.

Graduate Programs – Master’s and Ph.D. in Economics
Graduate programs in economics at NC State are taught jointly by the College of Management and the College of Agriculture and Life Sciences. The program continues to draw doctoral and master’s degree students from around the globe. Students in the fall 2009 incoming class – 18 Ph.D. students and 24 master’s students – represent 11 countries, including nine states in the U.S. Those who have teaching assistant positions are benefitting from a new initiative – the Interdisciplinary Consortium for Advancing TA Training – that was developed and co-founded by the program’s director, Tamah Morant and officially recognized by the NC State Graduate School in April 2009. This four-person initiative addresses a university-wide need for a flexible, customizable TA training program. The program also added an assistant director, Valarie James, to enhance student support services.

A new field of study was added to the curriculum in the past year – financial economics. It was developed by faculty in the College of Management’s departments of economics and business management. Its first two courses, in asset pricing and in corporate finance, were taught in fall 2008.

Goal 2: Foster an intellectual environment supportive of impactful, meaningful, leading-edge research.

Faculty research is a key component of the economic engine that drives innovation and business expansion. We value the contributions that our faculty makes to economic development through their research activities. That is why the college established a research development director position in 2006, to help faculty identify and pursue opportunities for research funding. This year, the impact of that decision was reflected in the college’s being recognized as one of two at NC State showing the most rapid improvement in funded research support. In the 2008-09 academic year, the College of Management for the first time surpassed $1 million in externally funded research expenditures. Grant applications submitted by the college’s faculty also were at an all-time high in 2008-09. 14 faculty representing the college’s four departments submitted 29 proposals for external funding totaling $5,126,123. Fifteen new sponsored research awards were received, with a total value of $1,056,258.

Sponsored Research – 2004 - 2009

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To further develop the college’s faculty research infrastructure, the college created a new assistant dean of research position and in February 2009, named Dr. Mitzi Montoya, Zelnak Professor of Marketing Research, to that position. She also chairs the college’s research committee and works closely with Brian Thomas, the college’s director of research development. In her new role, she is helping faculty to identify new funded research opportunities involving companies and funding agencies and new opportunities for collaborative research involving the college’s faculty and colleagues across campus. The following tables reflect the college’s faculty research productivity in the past year.
Following is a listing of grants awarded to College of Management faculty in 2008-2009 both from external sponsors and through internally funded programs:

**Externally funded awards:**
- David Henard, French American Cultural Exchange/Partner University Fund, in support of the MGIM program
- Wooseong Kang and Mitzi Montoya, Xerox Corporation, CIMS enhancement project titled “Value-based Dynamic Service Pricing”
- Tamah Morant, SAS Institute, Graduate Industrial Traineeship for Economics Ph.D. student Steven Major
- CIMS membership dues and renewals were received from the following CIMS members: BP America, IBM, Xerox, Meadwestvaco, Novozymes, Mars Petcare USA, and Eisai.

**Internally funded awards:**

**FRPD Program**
- David Townsend, “Early-Stage Capital Acquisition Among Technology-Based Ventures”
- Jing Zhao, “Golden Handshakes: The Impact of CEO Severance Contracts on Corporate R&D Spending”

**Edwin Gill Grant Program**
- Thayer Morrill, “The Hungarian Auction”
- Robin Pennington, “An Examination of the Antecedents and Moderators of Advocacy and Skeptical Attitudes in Accounting Professionals”
- David Townsend, “Early-Stage Capital Acquisition Among Technology-Based Ventures”
- Jing Zhao, “Carrot or Stick: Termination Threat, Severance Contracts, and CEO Pay-for-Performance Incentives”
- Bartley Danielsen, “The Impact of School Choice on Family Relocations”
- Eileen Taylor, “Whistleblowing in Audit Firms – Organizational Response and Power Distance”
- Christian Rossetti, “Structure of the Pharmaceutical Supply Chain: an autonomous agent examination of consolidation and productivity in drug delivery”

**Research Innovation Grant Program**
- Bartley Danielsen, “Family Relocations and the Environmental Impact of School Choice”
- Beverly Tyler and Turanay Caner, “The Effect of Alliance Portfolio Orientations on Incremental and radical Innovation in the U.S. Biopharmaceutical Industry”
- Richard Warr, “Investment in audit services and the external financing needs of the firm”
Goal 3: Promote and support the advanced use of technology in instruction and research.

In the accounting department, work began on a project funded by a grant from Ernst & Young – the development of a Second Life instructional and professional development and networking environment for students in the college’s accounting programs and E&Y professionals. A gift from Freudenberg IT LP made the SAP enterprise resource software available to our faculty for classroom use, through the SAP Classroom Alliance program. It also is available to other faculty across NC State who can incorporate it in their teaching.

In the MIE department, the BioSciences Initiative has secured an academic license for a Tech Mining tool and is using it to create both market and technology maps for its partner companies.

Members of our IT staff, along with our instructional technologist and a department-level instructional technology support staff member, assisted more than 20 faculty members participating in a Web CT/Vista Blackboard Refresher course, helping them to integrate Web CT Vista into their coursework and providing design assistance for course websites. They also worked with our faculty participants in a pilot test of Moodle, a new online classroom management tool being developed by the university.

Our IT staff also provided support for the growing use of Skype, Second Life, and other desktop multimedia applications, including the installation and support of desktop audio and video equipment such as webcams, headphones, speakers, and microphones. A new classroom capture and editing system installed in our Ericsson Technology Classroom enables faculty and other presenters to record their presentations and post them online for asynchronous viewing. Similar equipment is available to faculty in other Nelson classrooms via a mobile video conference unit.

Our instructional technologist/webmaster is available to provide technical support for individual faculty research projects. In the past year, he designed a workflow and strategy for faculty working with a FINRA project to collect and track research survey data using web tools, and provided training in implementing the workflow strategy. He also worked with our webmaster/instructional technologist to create an online directory of sponsored research opportunities, to help keep faculty continuously updated about research funding opportunities.

Goal 4: Strengthen corporate partnerships and global strategic alliances to enhance student opportunities and faculty research and to provide a student laboratory for learning based on real-world problems.

This goal is being met by continuing to build on existing industry partnerships established by individual faculty members and through our centers and initiatives (C&Is), as well as by strategically expanding our engagement with individual companies and international academic institutions.

Faculty in our C&Is contribute to the depth of our academic programs by helping to develop new courses and cases for student instruction, and by providing practica and internships, working with companies on NC State’s Centennial Campus and the Research Triangle Park, as well as globally. The C&Is also provide opportunities and, occasionally, funding for faculty research, as well as opportunities for the development and delivery of executive education through our Executive Programs unit.

The college’s assistant dean for research is working with the C&Is, individual faculty members, and companies to develop new opportunities for engagement with our students for business research through project-based classes and on an individual basis. The resulting real world experiences enhance our students’ ability to be competitive in the job market and make a contribution by helping to solve real work problems. Expanding research activities with companies – on both the faculty and student levels - will help to bring new information, tools and practices into the marketplace and will provide current, relevant, real world examples to strengthen our students’ academic experience. Engaging our students in research projects also helps assure that they not only are aware of current business issues but also have practice with the tools and techniques needed to work in today’s dynamic business environment. Read more in the center and initiative summary reports below.
The college’s activities with prospective new international partners for international academic programs are addressed in the Goal 1 portion of this report. Following are summary C&I reports showcasing their support of academic programs and research.

**Center for Innovation Management Studies (CIMS)**

The theme of the Fall 2008 meeting, held in Raleigh, was ‘Managing Upstream Innovation.’ This was the largest CIMS meeting ever held, with dozens of companies and academics represented. The agenda included presentations by recognized academic leaders in services innovation as well as a life sciences panel discussion focusing on their innovation related issues. At the meeting, CIMS launched its new, interactive website last fall, and announced that its quarterly newsletter is now available electronically. The Spring 2009 meeting was held in Corning, NY, where a CIMS’ Innovation Management School course overview was presented by Dr. Mitzi Montoya and Dr. Anne Massey, of Indiana University, on topic of ‘Leading Virtual Teams’. College of Management faculty members Claudia Kimbrough, Lynda Aiman-Smith and Larry Taylor also gave a presentation on the business benefits of virtual environments like Second Life. CIMS welcomed the biosciences company Eisa to its corporate membership.

**BB&T Program – Study of Free Markets and Institutions**

The Department of Economics launched its BB&T Program BB&T Program for the Study of Free Markets and Institutions, supported by a grant of $2 million over 10 years from the BB&T Foundation. The intent of the program is to encourage a thorough discussion of the moral foundations of capitalism. The program began operations in the fall 2008 semester with the offering of EC 305, A Closer Look at Capitalism, taught by Craig Newmark, acting program director. The class had an enrollment of 29, which is relatively large for a new course. For 2009-10, the program again offering EC 305 and also a master’s level course in the spring 2010 semester. Through the awarding of the BB&T Graduate Fellowship, the program will also support the research of Ms. Lei Ji, who is writing a dissertation on the effects of free trade on economic growth under the direction of Professor John Seater.

**Biosciences Management Initiative (BioSci)**

Faculty members engaged with the Biosciences Management Initiative are working closely with CIMS to develop new opportunities for engaging with industry and extending the knowledge base contained in CIMS to the biosciences industries. Together, they have been in discussions with the North Carolina Biotechnology Center (NCBC) on specific problems that could become focus areas for research activities and are developing custom programs to be delivered to biosciences companies through the college’s Executive Programs unit.

They have initiated a working group of faculty from NC State’s College of Textiles, Library Sciences, the Office of the Vice Chancellor of Research, and the College of Management to identify and use the best analytical tools for mining both structured and unstructured databases, and are evaluating some of these tools in collaboration with both IBM and with Georgia Tech. These efforts are being funded by the North Carolina Biotechnology Center (NCBC). BioSci also has secured an academic license for a Tech Mining tool and is using it to create both market and technology maps for its partner companies.

BioSci faculty served on steering committees for two NCBC Centers of Innovation (COI), the Nanobiotechnology COI and the Drug Discovery COI. They helped the first COI to win a phase−2 grant totaling $2,500,000, and the latter to win a phase−1 grant totaling $100,000, and were recognized by NCBC as having a big impact on the quality and commercial focus of these proposals.

The BioSci affiliated faculty also presented relevant data from the spring and fall CIMS meetings to those attending the Fourth Annual BioSciences Forum in October 2008 and at the opening ceremony for the Nyenrode Life Sciences and Healthcare Institute in early 2009.

BioSci has incorporated CIMS’s Innovation Management (IM) processes into the curriculum for the MBA program’s biosciences management concentration, and has expanded this curricula into the college’s Executive Education programs. The resulting executive courses were delivered to a top−20 pharmaceutical company as part of its innovation management improvements program. They also are scheduled for delivery in partnership with the Life Sciences & Healthcare Institute’s EMBA program of Nyenrode Business University in the Netherlands. The college is an integral part of this program that includes both Harvard Business School and the Kellogg Business School at Northwestern University. BioSci also has secured an academic license for a Tech Mining tool and is using this tool to create both market and technology maps for its partner companies.
Enterprise Risk Management Initiative (ERM)
The ERM Initiative hosted five ERM Roundtables, four in downtown Raleigh and one in Charlotte, averaging approximately 125 attendees per event and generating over $30,000 in registrations and sponsorships to cover Initiative costs. Master of Accounting students were among the attendees learning from practitioners about how ERM is implemented in some of the world’s leading companies.

The presenters represented KBR, Inc., a Houston, TX-based Fortune 250 company; the New York Stock Exchange; Standard & Poor’s; H. J. Heinz Company, a Fortune 500 company headquartered in Pittsburgh, PA; and the State of Washington. Over 4,000 people have attended one or more of the 37 ERM Roundtables held in the past five years.
The ERM Initiative Advisory Board convened for one meeting in October 2008, in conjunction with the October ERM Roundtable.

The ERM Initiative also developed and conducted executive education workshops and professional development programs in collaboration with the American Institute of CPAs (AICPA) and the North Carolina Commissioner of Banks. These national and state-wide workshops are primarily targeted to individuals serving on boards of directors or as C-level executives who report directly to boards. The AICPA workshops were held in New York, NY in October 2008 and March 2009 for approximately 80 attendees. Advanced Bank Directors’ workshops offered in conjunction with the NC Commissioner of Banks were held at The Grandover Resort in Greensboro in September 2008 and May 2009 for approximately 100 attendees. These collective efforts generated over $85,000 in revenues to cover costs.

Additionally, individual ERM Initiative faculty have worked directly with several organizations during the year to advise on ERM implementation and build-out, including Reynolds American (RJR), the Atlanta Public Schools, the Internal Revenue Service in Washington, D.C., AgFirst Farm Credit Bank in Columbia, SC, and First Premier Bank/Premier Bankcard, LLC, in Sioux Falls, SD.

The ERM Initiative’s website was updated this past year, improving the search, delivery and presentation of ERM knowledge resources hosted on the site. Included are abstracts of over 200 articles, whitepapers, research studies, and presentation summaries of the 37 ERM Roundtables for free download in addition to information about ERM Initiative activities and events. The ERM Initiative is generally on the first page of a Google search of the term enterprise risk management and more than 13,000 people visited the site at least once in the past fiscal year.

Faculty associated with the ERM Initiative continue to develop research in this field. They have submitted grant proposals to IEED and the Spencer Educational Foundation and completed two research projects that were previously funded by NC State IEED and the IBM Center for the Business of Government.

The ERM Initiative also received external funding for a survey-based research project from the AICPA. Mark Beasley, director, and Bonnie Hancock, associate director, presented a summary of the research via an AICPA webinar. Beasley, Branson, and Hancock have submitted a paper based on this research to the Journal of Accountancy. Another ERM-related article is currently under editorial review at the Harvard Business Review.

Grant Thornton recently published an article in its Corporate Governor Series entitled “Enterprise Risk Management: Creating Value in a Volatile Economy” that highlights the ERM Initiative and results from the AICPA-funded research. A whitepaper focused on the board and senior management’s role in enterprise risk oversight was recently prepared by Beasley, Branson and Hancock, and submitted to COSO. A related four-page summary was developed and accepted by COSO for distribution to members of the COSO founding organizations (AAA, AICPA, FEI, IMA, and IIA).

Faculty involved with the ERM Initiative delivered three MBA courses providing students with core knowledge of ERM concepts and best practices. Enrollment numbers reflect growing student interest in the subject. Course enrollment for the “Overview of ERM” grew from 20 in Fall 2007 to 40 in Fall 2008. The Initiative also supported the development of two one-hour MBA elective courses, taught by Hancock and Branson, that collectively enrolled 71 MBA students participating in the NC State Jenkins MBA part time program for working professionals.

A new “Overview of ERM” course has now been approved for students in the Jenkins MBA finance concentration. As part of the coursework, ERM Initiative faculty arranged for guest speakers for the “Overview of ERM” course, bringing a real-world perspective on ERM implementation challenges in the corporate environment. Students in the ERM courses and in the Graduate Economics program’s Financial Mathematics concentration were regular participants in the ERM Roundtables.
Supply Chain Resource Cooperative (SCRC)

This MBA and undergraduate supply chain concentrations are supported by the Supply Chain Resource Cooperative (SCRC), an industry-university partnership that represents a broad spectrum of industries dedicated to the development of future supply chain professionals. For the past ten years, this partnership has provided faculty and students with an opportunity to work with professional supply chain managers at all levels of responsibility, tackling real industry situations through structured team projects. It also serves the member companies by providing applied research and knowledge to help them achieve supply chain excellence.

The achievements of the SCRC in 2008 and 2009 are underscored by the accomplishments of alumni and the accolades of corporate partners.

- Every MBA supply chain management student graduating from our program completed a minimum of two supply chain projects, and was placed in a relevant position (in a difficult job market) because of his or her strong, project-based experience in the program.
- In 2009, the SCRC was highlighted in numerous publications, including the Supply Chain Management Review, Wall Street Journal, Inside Supply Management, and Industry Week.

In 2008–2009, faculty and students completed more than 40 individual student project experiences, and selected teams presented results of their projects at the SCRC Company Partner semi-annual meetings held Raleigh. The theme of the Dec. 4-5 meeting in 2008 was Managing the Trough, and the April 23–24, 2009, meeting’s theme was Strategic Sourcing in the Downturn. Both meetings were attended by more than 40 executives and guests. The April 2009 meeting featured guest speakers Tim Carroll, IBM; Robert Belshaw, GE Capital; and Dave Nelson and Bill Knittle, BP. A panel discussion included Gary Page, BAC, John Cox, Biogen; Mike Minter, Deere, and Guarav Saini, Nortel. Guest speakers Jim Field, vice president of John Deere and Dr. Steve Allen, the college’s associate dean for graduate programs and research, presented at the Dec. 2008 meeting. Student projects presented at each of the meetings are shown below.

April 2009 Student Project Presentations
- MBA SCM Practicum projects were completed for Ministry Healthcare, Chevron, Duke Energy, Caterpillar, IBM, and Nortel Networks
- MBA Supply Management Course projects were completed for Bank of America, Blue Cross Blue Shield NC, IBM, and Nortel Networks
- Undergraduate Honors Practicum projects were completed for Bank of America, Caterpillar, IBM, and Nortel Networks.

December 2008 Student Project Presentations
- MBA SCM Practicum projects were completed for Ministry Healthcare, Progress Energy, Chevron, Duke Energy, and BCBS–NC
- MBA Supply Management Course projects were completed for Halliburton, IBM, Lenovo,
- Undergraduate Honors Practicum projects were completed for Lenovo, Caterpillar, Progress Energy, and Nortel Networks.

Placement
The SCRC has been instrumental in placing 100% of full time MBAs students in the supply chain management (SCM) concentration, with both member companies and others. Students and recruiters alike cite project experiences as the number one item driving placements. Starting salaries for these students range from $50K–$100K and included six placements over $80,000. The SCRC also has developed internship opportunities for all full time MBA students in the SCM as well as students in other concentrations.

Current Partners
In 2008, the Caterpillar Foundation and Dr. James Owens, CEO of Caterpillar and graduate of the NC State doctoral program in economics, donated a combined $2.5 million gift to support the SCRC. These funds funded renovation of the Nelson Hall Annex, providing much needed space for student research project team activities, and faculty and staff offices. The gift included funding for a future chaired professor in supply chain management, as well as on-going research and educational products for SCRC members.

**Technology Entrepreneurship Commercialization (TEC)**

The Technology, Entrepreneurship and Commercialization (TEC) Initiative is an umbrella program that supports the core classes for the Entrepreneurship & Technology Commercialization concentration in the college’s Jenkins MBA program, as well as entrepreneurial outreach and engagement activities and executive education. To be successful, an entrepreneurship program must be a dynamic hub of activity that engages students, researchers and practitioners. The best known university entrepreneurship programs all seek to create the optimal educational environment by embedding their students in the local entrepreneurial community and supporting their curriculum with the latest knowledge research can provide. Following are this program’s highlights from the 2008-09 academic year.

- MBA 570: Seven student teams developed growth strategies and recommendations for seven small growth-oriented companies. This class received significant support from the Hutchison Law Group and several guest lecturers.

- MBA/MSE 576-7: 40 technologies from two universities and the private sector were provided to 6 student teams for evaluation and potential business development. Thirteen volunteer mentors helped guide the teams as they followed the TEC Algorithm. In the end, this year’s class produced four potential companies.

TEC faculty supported the revision of the undergraduate curriculum to include an entrepreneurship concentration in the bachelor’s of business administration degree program, and a sequence of entrepreneurship courses in a new minor in business administration. Previously, the graduate and undergraduate entrepreneurship curricula had been developed separately from each other and bore little similarity in approach or outcomes. The new curricula will take advantage of the latest research in entrepreneurship and provide a solid basis for those who advance into the MBA entrepreneurship and technology commercialization concentration.

An article about TEC by three of the college’s entrepreneurship faculty – Ted Baker, Steve Barr and Steve Markham – is forthcoming in the Academy of Management Learning Education Journal: Bridging the Valley of Death: Lesson Learned from 14 Years of Technology Commercialization Education.”

TEC continues its relationship with NC State’s College of Engineering (COE), whose students also may enroll in the TEC curriculum. TEC alumnus Mark Johnson, associate professor in materials science in COE, serves primarily as a liaison with COE technologists.

**Goal 5: Strategically develop new programs and initiatives and increase enrollments to serve the growing demand for the college’s technology- and innovation-based academic and executive programs**

Centers and initiatives in the college are working with their advisory boards and partner companies to help assure alignment between curriculum and industry needs and that students are receiving the knowledge and experience needed for success in their chosen fields. Similarly, the C&I’s interaction with industry leaders and the college are leading to new dynamic Executive Programs offerings and faculty research opportunities.

Following are the college’s fall 2009 enrollment numbers, by academic program.

<table>
<thead>
<tr>
<th>Department</th>
<th>New Students</th>
<th>Continuing</th>
<th>Total</th>
<th>Grand Total by program</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC FT</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC PT</td>
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<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>MAC Totals</td>
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<td>4</td>
<td>107</td>
<td>107</td>
</tr>
<tr>
<td>MBA FT</td>
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<td>32</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>MBA PT</td>
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<td>255</td>
<td>327</td>
<td></td>
</tr>
<tr>
<td>MBA Totals</td>
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<td>255</td>
<td>425</td>
<td>425</td>
</tr>
</tbody>
</table>

North Carolina State University College of Management
<table>
<thead>
<tr>
<th>MGIM</th>
<th>Econ Masters</th>
<th>Econ PhD</th>
<th>Econ Total (includes CALS Grad Econ students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>17</td>
<td>40</td>
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<td>69</td>
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</tr>
<tr>
<td></td>
<td>86</td>
<td>96</td>
<td>182</td>
</tr>
</tbody>
</table>

| Jenkins Graduate School Totals | 302 | 433 | 735 | 735 |

| Undergraduates                | 1795 | 1795 |
| Undergrad Freshmen            | 392  | 392  |
| Undergrad Transfer (Internal) | 250  | 250  |
| Undergrad Transfer (External) | 149  | 149  |
| Undergrad Totals              | 791  | 1795 | 2586 | 2586 |
| College Grand Total           | 3321 | 3321 |

Steps initiated in 2008–09 toward achieving enrollment goals follow.

- Complete arrangements and launch in fall 2009 a new Certificate in Technology, Entrepreneurship and Commercialization (TEC) for non-MBA graduate students in fall 2009.
- New course on global health care markets, developed through the BioSciences Management Initiative, was taught for the first time to MBA students in spring 2009.
- TEC is expanding its international network of technology-based entrepreneurial educators and programs through TECnet, a consortium of schools following the TEC Algorithm upon which the Jenkins MBA program’s entrepreneurship and technology commercialization concentration is based. TECnet was established last year.
- New required course in the MBA program’s BioSciences concentration: “Legal/Marketing Dynamics in Biotech Commerce,” created and offered for the first time by Stephen Schanz, teaching assistant professor in the Department of Management, Innovation and Entrepreneurship.
- In meetings with approximately 14 biosciences companies in the Research Triangle Park, BioSci faculty worked with the companies to define their executive education needs, evaluate projects for possible incorporation into student practicum experiences, recruit new MBA candidates for the biosciences concentration in the NC State Jenkins MBA program, and identify work environments for graduating students, leading to the placement of nearly all the full-time graduating MBA students in the biosciences management concentration.
- The Biosciences Management concentration in the college’s Jenkins MBA program had about 48 students last year, up about 20 percent per year over the past four years. Enrollment in the concentration’s key course, ‘Issues in Biosciences Management,’ was the highest to date – 31. Twenty students completed six practica last year, working with six different companies, gaining real world experience on operating issues faced by today’s biosciences companies.
- The Center for Innovation Management Studies joined forces with the college’s Executive Programs unit to coordinate the development and delivery of custom programs to companies, including those associated with CIMS and is exploring new relationships with other colleges, centers and institutes within the NC State University system.

Discussions are under way regarding:

- MBA/Industrial & Systems Engineering program, in collaboration with the College of Engineering’s Edward P. Fitts Department of Industrial and Systems Engineering.
- MS/MBA and DVM/MBA dual degree programs.
- Certificate in Medical Devices, provided by the college’s BioSciences Management Initiative in collaboration with the Biomedical Engineering Program in the NC State University College of Engineering.
- Partnering with the NSF-funded FREEDM Center in the College of Engineering, to have its graduate students take the 576/577 TEC program sequence as part of their participation in the center.
Executive Programs
The College of Management’s Executive Programs delivered training programs in North America, Europe, Middle-East, Far East, and South America, with the involvement of more than 20 College of Management faculty and staff. Included were several new business relationships with firms such as Blue Cross and Blue Shield of North Carolina, Xerox, North Carolina Biotech Center and the Singapore Institute of Management. Executive Programs continues to develop its relationship with the Industrial Research Institute (IRI) through the Innovation Management School, a partnership between the college’s Center for Innovation Management Studies and the IRI.

International Studies
While the college has always encouraged students to participate in international study opportunities offered through NC State University’s Office of International Studies, today’s business students increasingly need a solid understanding of how business is conducted in other countries and between countries. The college’s goal is that each of our students will experience international study at some level.

The creation this year of a director of international studies position – and the appointment of its first director, Dr. David Henard, associate professor of marketing – affirms the college’s commitment to strategically expand student international study opportunities. Henard developed the Master of Global Innovation Management program and developed an online index of business-focused study abroad opportunities for College of Management students while also working with the college’s leadership team to identify and develop new opportunities. One of those is the college’s acceptance into the CIMBA international study consortium based in the Kansas University School of Business.

The college also has partnerships with international business schools in Australia, Austria, China, Denmark, England, France, Germany, Ireland, The Netherlands, Mexico, and Singapore. NC State’s dual-degree Hamilton Scholars Program, offered jointly by the College of Management and College of Humanities and Social Sciences, continues to grow in popularity. Following are selected highlights of our newest international partnerships and opportunities.

- **Master of Global Innovation Management (MGIM).** Offered in partnership with the Université Paul Cézanne IAE Graduate School of Management in Puyricard near Aix-en-Provence, France, this new master’s degree program is the college’s first initiative to globalize its curriculum and faculty research opportunities. It brings together students from around the world and is designed to give engineering, science and other technology-oriented students a strong exposure to core business management skills while providing in-depth exposure to a host of global innovation management issues. Fall semester classes are held in France, and winter session classes are held at the NC State College of Management in the U.S. The first cohort of 18 students began in fall 2008 and graduated in May 2009. MGIM students receive graduate degrees from both NC State and IAE. Discussions are under way to bring Zhejiang University in China into the partnership, providing a one-month module in China prior to degree completion. After gaining several years’ work experience, MGIM graduates may apply to the college’s Jenkins MBA program and complete that degree requirement with one additional year of study.

- **Joint Institute for Global Business and Entrepreneurship.** A memorandum of understanding regarding this new initiative was signed in fall 2008 at the NC State College of Management with the College of Management at Zhejiang University in China. Once established, the new institute will be the second program launched as part of the NC State College of Management’s globalization initiative.

- **International Partnership of Business Schools (IPBS).** Discussion began this year for the NC State College of Management to join this consortium of leading business schools located in Europe and Americas, with formal acceptance to be completed in fall 2009.

- **Hamilton Scholars.** The college currently started the fall semester with 70 undergraduate students in the dual-degree Hamilton Scholars program, offered jointly by the College of Management and College of Humanities and Social Sciences. This program includes an intensive foreign studies component.

- **Several College of Management faculty members teach business courses abroad at our partner schools, including Debra Brown, Zhejiang University, China; David Henard, Mitzi Montoya and Cecil Bozarth, France; Bruce Branson, Prague Institute in the Czech Republic,**

The college also hosts international students, including six students from Zhejiang University studying in the MAC program through NC State’s 3-plus-1 program with the Chinese university; undergraduate French students in the U.S. for their study abroad semester; and scholars from Turkey and China hosted by the Department of Economics.

The college’s leadership team continues to seek out new international opportunities for students and new international partnerships for faculty research.
- Dean Ira Weiss traveled to France to evaluate a consortium for providing undergraduate study abroad opportunities, and to Zhejiang University in China, to meet with faculty at Shanghai University to discuss international study opportunities there.
- Associate Dean Steve Allen traveled to Denmark and Taiwan to discuss academic program opportunities.
- Associate Dean Shannon Davis traveled to Korea with an NC State delegation to discuss a new international campus being planned there, to be started by 2011. It would involve about 3,000 undergraduate and graduate students from NC State and a total of 15,000 from five U.S. universities, including NC State. While in Korea, Davis met with officials from LG Electronics, which has a corporate university and is heavily engaged in corporate development and training. The company was very interested in having NC State faculty teach and train their employees.
- Wiess, Davis and Assoc. Professor David Henard attended the semi-annual meeting of the International Partnership of Business Schools, held in France. Discussions included alignment of undergraduate curriculum and the exchange relationship.
- Montoya visited Bocconi University near Milan, Italy, to discuss a research partnership and make connections in the area of services innovation.
- Other faculty expanded or continued relationships with colleagues around the globe, including Ireland, Japan, the Dominican Republic, and The Netherlands through individual contacts or formal presentations.